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[Abstract]: In pastoral grazing lands in southern Queensland the tree layer is frequently removed or reduced to increase grass production for livestock grazing, resulting in a highly heterogeneous landscape ranging from remnant vegetation areas to scattered tree areas to open areas (with or without woody regrowth). Currently, there is little information on what tree density should be maintained on grazing lands to ensure both production and conservation goals are met. The aim of this research was to determine if vegetation management has an effect on the floristic composition, species richness and plant cover of two woodland communities within the Traprock region of southern Queensland. Forty-seven sites were sampled across the region according to vegetation type (ironbark/gum woodland and box woodland), density of mature trees [low (<6 trees/ha), medium (6-20 trees/ha) and high (>20 trees/ha)], and the presence or absence of woody regrowth. A nMDS (non-metric multidimensional scaling) ordination and ANOSIM (analysis of similarity) revealed significant differences in floristic composition between mature tree density classes, while woody regrowth areas have a similar floristic composition regardless of age or type (shrub or tree regrowth). Open areas (low tree density) converge to a similar floristic composition regardless of pre-clearing vegetation type, while the floristic composition of woody regrowth areas may, in the long-term, tend towards that of high tree density areas and have important biodiversity value in largely cleared landscapes. In addition, the results have indicated that, at least for grassy box woodlands, a medium density of trees may satisfy both biodiversity and production goals. Results from this study will contribute to the on-going development of management strategies for the future sustainability of grazing landscapes.